REMARKS

Claims 1, 7, 13, 19, 21, and 25 are amended. Claim 1 is amended to include the limitations of claim 5, which is now cancelled. The other independent claims are amended to include similar limitations. Claims 5, 17, 20, and 24 are cancelled without prejudice. As explained below, the prior art is not understood to teach or suggest these limitations. Claims 1-4, 6-28 are pending in this application. Reconsideration and allowance of the application are respectfully requested.

Claims 19-28 are understood to be directed to statutory subject matter under 35 USC §101 and the rejection is respectfully traversed. The rejection should be withdrawn because based on the guidance provided by MPEP §2106 II.A., the Office Action does not establish a *prima facie* case that the invention as a whole is directed solely to an abstract idea or to manipulation of abstract ideas or does not produce a useful result.

Claim 19, for example, includes "means for storing ..." which is tangible and useful. Claim 20 is directed to statutory subject matter since it depends from claim 19.

Claim 21 is understood to be directed to statutory subject matter because the receiving and interfacing steps, for example, are understood to produce tangible and useful results. The rejection is moot, however, in view of the amendment to claim 21 in which limitations are added for outputting the message formed in interfacing (e.g., FIG. 5 and [0044]).

Claim 25 sets forth a first data processing arrangement, a data storage arrangement, and a second data processing arrangement. These limitations would be understood to have practical and tangible applications. Thus, claim 25 and claims 26-28 depending therefrom are directed to statutory subject matter.

For at least the reasons set forth above, the rejection of claims 19-28 as being directed to non-statutory subject matter should be withdrawn.

Claims 1, 2, 5-9, 12-14, 17-20 and 25-27 are understood to be novel under 35 USC §102(b)over "Eanes" (U.S. Pub. No. 2003/0005412 to Eanes). The rejection is

respectfully traversed because the Office Action does not show that all the limitations of the claims are taught by Eanes.

The limitations of claim 1, for example, specify both an ontology specification and a semantic interpretation specification. The ontology specification describes messages of the distributed computing service, and the semantic interpretation specification describes rules for semantically handling the messages specified in the ontology specification. Procedures are obtained from the rules engine for interacting with the distributed service based on the rules of the semantic interpretation specification that are entered in the rules engine. Thus, the claimed process for obtaining the procedures frees a user from having to build the programmatic interfaces [0041].

As used in the claims, Eanes is not understood to teach these limitations. The Office Action cites Eanes paragraphs [0026] and [0029]-[0045] as containing elements corresponding to the claimed semantic interpretation specification that describes rules for semantically handling the messages, as specified in the ontology specification. However, these paragraphs describe conceptual component operations without reference to descriptions of messages in the ontology description and of the rules for semantically handling those messages. Eanes generally describes conceptual component operations that may be used to describe agent behavior [0029]. There is no apparent reference to rules for handling the messages specified in an ontology specification. In addition, Eanes requires user interaction with the interface to define the agent behavior as shown in FIG. 2, apparently because Eanes has no semantic interpretation specification of rules for handling messages. Therefore, the limitations of claim 1 are not shown to be taught by Eanes.

Independent claims 7, 13, 19, 21, and 25 include limitations similar to those of claim 1 and are not shown to be anticipated for the reasons set forth above.

Claims 2, 6, 8, 9, 12, 14, 18, 26, and 27 depend from the base claims discussed above, and the limitations are not shown to be taught by Eanes for at least the reasons set forth above.

The rejection of claims 1, 2, 5-9, 12-14, 17-20 and 25-27 should be withdrawn because all the limitations are not shown to be taught by Eanes.

Claims 3, 4, 10, 11, 15, 16, 21-24, and 28 are understood to be patentable under 35 USC §103(a) over Eanes in view Ott et al. (U.S. Pub. No. 2002/0150093). The rejection is respectfully traversed because the Office Action does not show that all the limitations are suggested by the combination and does not provide a proper motivation for modifying the teachings of Eanes with teachings of Ott.

As to claims 3, 4, 10, 11, 15, 16, 23, and 28, these claims include limitations of the semantic interpretation specification comprising an expert system interpretable specification and further limitations related to use of a rule-based expert system.

As explained above, Eanes does not suggest the claimed semantic interpretation specification that describes rules for semantically handling the messages, as specified in the ontology specification. Thus, the Eanes and Ott references would not suggest to one skilled in the art to use an expert system interpretable specification for the semantic interpretation specification. Furthermore, Ott applies expert systems and rule-based programming to semantic profiles of content consumers [0083], [0058-0081]. Ott's semantic router uses the semantic profiles in determining that information received from a content producer is to be sent to a content consumer [0081]. Ott's particular use does not suggest the specific application to a semantic interpretation specification that describes rules for semantically handling the messages of the distributed computing service.

The asserted motivation for modifying the teachings of Eanes with teachings of Ott is improper. The Office Action states that "it would have been obvious ... to modify the method of Eanes with the teachings of Ott ... by the fact that Eanes explicitly states that the process of generating agents can be automated ... based on the rules provided and Ott explicitly states that the primary purpose of an expert system can be used to automate processes normally performed by humans ..." The asserted motivation is improper because it does not suggest the specifically claimed manner in which the semantic interpretation specification, which describes rules for semantically handling the messages specified in the ontology specification, comprises an expert system interpretable specification; the Office Action only generally cites the automation that may be achieved with expert systems and Eanes' suggestion of automation. Thus, the

general desire for automation and the general capabilities of expert systems are insufficient to motivate the specifically claimed combination.

As to claim 21, for the reasons set forth above for claim 1, the Office Action does not show that Eanes teaches the limitations of both an ontology specification and a semantic interpretation specification, where the ontology specification describes messages of the distributed computing service, and the semantic interpretation specification describes rules for semantically handling the messages specified in the ontology specification, and procedures are obtained from the rules engine for interacting with the distributed service based on the rules of the semantic interpretation specification that are entered in the rules engine. Thus, the limitations of claim 21 are not shown to be suggested by the Eanes-Ott combination for at least the reasons set forth above.

Claim 22 depends from claim 21 and the limitations are not shown to be suggested for the reasons set forth above.

The rejection of claims 3, 4, 10, 11, 15, 16, 21-24, and 28 should be withdrawn because a *prima facie* case of obviousness has not been established.

Withdrawal of the rejections and reconsideration of the claims are respectfully requested in view of the amended claims and remarks set forth above. No extension of time is believed to be necessary for consideration of this response. However, if an extension of time is required, please consider this a petition for a sufficient number of months for consideration of this response. If there are any additional fees in connection with this response, please charge Deposit Account No. 50-0996 (HPCO.125PA).

Respectfully submitted,

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